

LISTING OF THE CLAIMS

1. (Previously Presented) A spring mattress with longitudinal strings, the spring mattress comprising:

a plurality of interconnected coil springs enclosed in covers, and

a plurality of parallel strings arranged side by side and interconnected by a surface attachment between abutting surfaces of adjacent strings,

wherein a slit is provided between at least two coil springs located adjacent to one another within the same string, the slit in combination with the surface attachment allowing an increased interjacent separation distance to be formed between said adjacent coil springs.

2. (Previously Presented) The spring mattress as claimed in claim 1, wherein the slit is provided such that the slit is completely enclosed between an upper and a lower part of the string.

3. (Previously Presented) The spring mattress as claimed in claim 1, wherein the slit is provided between all adjacent coil springs in all the strings arranged in parallel.

4. (Previously Presented) The spring mattress as claimed in claim 1, wherein the slit is provided only between some of the adjacent coil springs of at least one string to obtain zones with different properties across the mattress.

5. (Previously Presented) The spring mattress as claimed in claim 1, wherein the covers are joined together on both sides along the slit to close the covers along the slit.

6. (Previously Presented) The spring mattress as claimed in claim 1, wherein the surface attachment configured to interconnect the strings includes at least one of gluing and welding.

7. (Previously Presented) The spring mattress as claimed in claim 1, wherein the separation distance exceeds about 10% of the diameter of the largest spiral turn of the adjacent coil springs.

8. (Previously Presented) The spring mattress as claimed in claim 1, wherein the separation distance exceeds 1 cm.

9. (Previously Presented) The spring mattress as claimed in claim 1, wherein a spring density of the spring mattress along a direction of slits in a string is less than 15 springs per meter.

10. (Previously Presented) The spring mattress as claimed in claim 1, wherein the covers are made from a textile fabric that can be welded.

11. (Previously Presented) A method of manufacturing a spring mattress, the method comprising:

arranging coil springs enclosed in covers in longitudinal strings, and

interconnecting a plurality of parallel strings side by side by a surface attachment between abutting surfaces of adjacent strings, and

providing a slit between at least two coil springs located adjacent to one another within the same string such that the slit in combination with the surface attachment allows an increased interjacent separation distance to be formed between the adjacent coil springs.

12. (Previously Presented) The method as claimed in claim 11, wherein the slit is provided such that the slit is completely enclosed between an upper and a lower part of the string.

13. (Previously Presented) The method as claimed in claim 11, further comprising joining together a cover material on both sides along the slit to close the covers along the slit, wherein the cover material is joined before providing the slit.

14. (Previously Presented) The method as claimed in claim 11, wherein the plurality of parallel strings are interconnected side by side by at least one of gluing and welding.

15. (Previously Presented) The method as claimed in claim 11, wherein arranging the coil springs further comprises:

arranging a strip of a cover material such that it is folded over the coil springs arranged in succession therebetween,

providing a longitudinal joining line at the open end of the folded strip, and

arranging, before or after providing the longitudinal joining line, at least one transverse joining line between adjacent pair of coil springs.

16. (Previously Presented) The method as claimed in claim 15, wherein the slit between adjacently located coil springs is provided at the same time as or directly after arranging the at least one transverse joining line.

17. (Previously Presented) An apparatus for manufacturing a spring mattress, the apparatus comprising:

means for arranging coil springs such that the coil springs are enclosed in covers in longitudinal strings, and

means for interconnecting a plurality of parallel strings side by side by surface attachment between abutting surfaces of adjacent strings,

wherein the apparatus further includes means for providing a slit between at least two coil springs located adjacent to one another within a same string such that the slit in combination with the surface attachment allows an increased interjacent separation distance to be formed between the adjacent coil springs.

18. (Previously Presented) The apparatus as claimed in claim 17, wherein the means for providing the slit between at least two coil springs located adjacent to one another within the same string are configured to arrange the slit such that the slit is completely enclosed between an upper and a lower part of the string.

19. (Previously Presented) The apparatus as claimed in claim 17, further comprising means for joining together a cover material on both sides along the slit, to close the covers along the slit.

20. (Previously Presented) The apparatus as claimed in claim 17, wherein the means for interconnecting a plurality of parallel strings side by side by surface attachment between abutting surfaces are configured to effect said interconnection by at least one of gluing and welding.

21. (Previously Presented) The apparatus as claimed in claim 17, wherein the means for arranging the coil springs comprise:

means for arranging a strip of a cover material so that the cover material is folded over the coil springs arranged in succession therebetween,

means for arranging a longitudinal joining line at an open end of the folded strip , and

means for arranging at least one transverse joining line between each pair of adjacent springs.

22. (Previously Presented) The apparatus as claimed in claim 21, wherein the means for providing the slit is a cutting tool configured to move in a direction of the cover material.

23. (Previously Presented) The apparatus as claimed in claim 22, wherein the cutting tool is arranged adjacent to the means for arranging the at least one transverse joining line between each adjacent pair of springs and wherein the cutting

tool is configured to operate jointly with the means for arranging the at least one transverse joining line.

24. (Previously Presented) The spring mattress as claimed in claim 1, wherein the separation distance exceeds about 15% of the diameter of the largest spiral turn of the adjacent coil springs.

25. (Previously Presented) The spring mattress as claimed in claim 1, wherein the separation distance exceeds about 20% of the diameter of the largest spiral turn of the adjacent coil springs.

26. (Previously Presented) The spring mattress as claimed in claim 1, wherein a spring density of the spring mattress along a direction of slits in a string is less than 13 springs per meter.

27. (Previously Presented) The spring mattress as claimed in claim 1, wherein each string of the plurality of parallel strings includes the plurality of coil springs enclosed in a continuous cover.

28. (Previously Presented) The spring mattress as claimed in claim 1, wherein the slit is a cut out opening in the enclosing cover of the string and at least a portion of the enclosing cover surrounding the slit is unbroken and continuous.

29. (Previously Presented) The method as claimed in claim 11, further comprising:

interconnecting each string of the plurality of parallel strings including the coils springs enclosed in a continuous cover.

30. (Previously Presented) The method as claimed in claim 11, further comprising:

providing the slit as a cut out opening in the enclosed cover of the string around at least a portion of the enclosing cover surrounding the slit, the portion of the enclosing cover surrounding the slit being unbroken and continuous.

31. (Previously Presented) The apparatus as claimed in claim 17, wherein the means for arranging coil springs arrange the coil springs such that the coil springs are enclosed in a continuous cover.

32. (Previously Presented) The apparatus as claimed in claim 17, wherein the means for providing the slit provide a slit that is a cut out opening in the enclosing cover of the string and at least a portion of the enclosing cover surrounding the slit is unbroken and continuous.